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An evolutionary particle swarm optimization algorithm for mathematical processing of experimental spectra

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Abstract

© 2017, Pleiades Publishing, Ltd.A particle swarm optimization algorithm is applied for mathematical treatment of Fourier-transform IR spectra of branched copolymers of methyl methacrylate. The efficiency of reconstruction of the spectra using the particle swarm optimization algorithm as compared with the least squares method is illustrated by the example of decomposition of a six-component experimental spectrum.

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